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Statistical Bulletin

METROPOLITAN LIFE INSURANCE COMPANY

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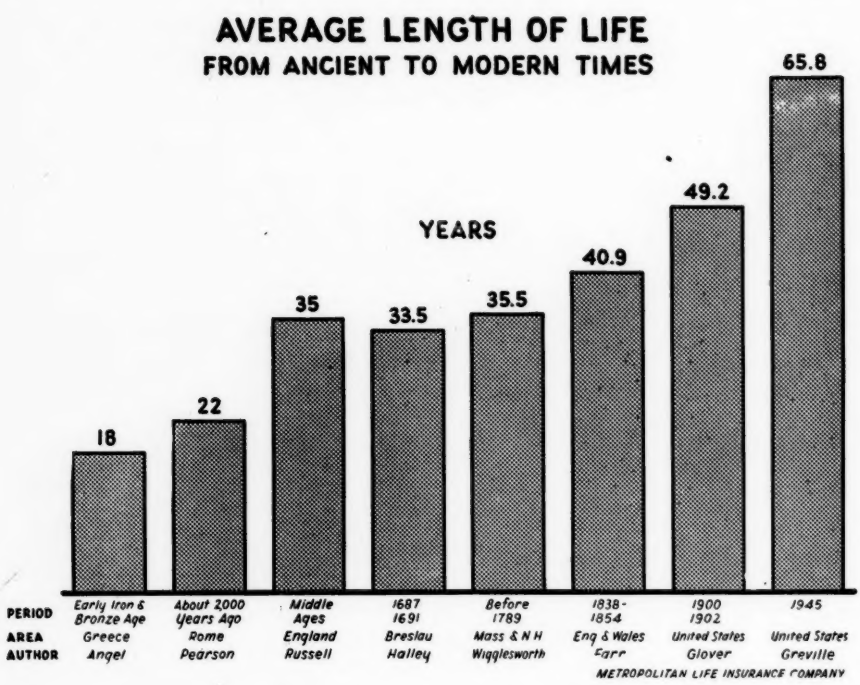
Longevity from Ancient to Modern Times

THE march of civilization from the time of prehistoric man to the present has been accompanied by a progressive increase in the average length of life. For thousands of years in man's early history, the gains in longevity were probably very small, but as he achieved increasing success in controlling his environment, he made more and more progress in adding years to his life. In fact, the average length of life has undoubtedly increased more in the past century than in all prior centuries together, since the dawn of civilization. Landmarks in the progress in human longevity are shown graphically in the chart on page 2.

It is only within comparatively recent times, historically speaking, that the data necessary for a true determination of the average length of human life have become available. Approximate estimates for earlier times must necessarily be based upon whatever fragmentary information has been brought to light by anthropological research. Thus, the longevity of prehistoric man has been estimated from the characteristics of fossil remains. On the basis of such meager evidence, it appears that the average length of life of prehistoric man was perhaps 18 years—a pitiful lease of life as measured by modern standards. This does not mean that there were none surviving to mature life, but that the number of deaths in infancy and childhood were terrifyingly high. To judge by the large proportion of preserved skulls that show traces of heavy blows, death by violence seems to have been a common occurrence at that period.

A very gradual increase in longevity during early civilization is suggested in a study by J. L. Angel of a series of Greek skulls which cover a long period of time. The increasing average age at death, as indicated in this survey, may well be related to advances in living conditions and in nutrition which are indicated by clues in archaeological findings. In addition, the emergence of medical skills early in Greek history undoubtedly contributed to the advance in longevity over that of prehistoric times.

Longevity in Roman Egypt about 2,000 years ago was studied by Karl Pearson, the noted British mathematician, from the ages at death recorded on mummy cases. From



these data he drew a curve of expectation of life according to age, which yielded a figure of about 22 years as the expectation at birth. While the ingenuity and enterprise of Pearson and other investigators of early records are to be commended, probably the only conclusion to be drawn with any great degree of accuracy is that, in antiquity, the average length of life may have been somewhere between 20 and 30 years.

The information available regarding the average duration of human life in the Middle Ages comes as a by-product of records concerning inheritance of property. Such records have been used by J. C. Russell to find the average length of life for a generation of males born in England before 1276; his computations show an average of 35 years. This figure, which represents at best the situation among the more favored economic classes, may be indicative of some gain in longevity since the beginning of the Christian era.

There was apparently little change in average length of life during the five centuries following the period covered by Russell's table. A life table by the famous astronomer Halley, based upon records for Breslau during 1687-1691, gave 33.5 years as the average length of life. A figure of 35.5 years was found by Wigglesworth from death records in Massachusetts and New Hampshire for a period before 1789. The rising standard of living which was be-

ginning to make itself felt then, and the development of scientific knowledge, evidently had a beneficial effect upon longevity. According to life tables constructed by the eminent statistician William Farr for England and Wales, covering the period 1838-1854, the average length of life had increased to 40.9 years, a gain of a little more than five years over the figures last cited. As medical and sanitary science developed at a quickened pace in the remaining years of the century, the average length of human life continued to advance, and in the United States, where advantage was taken of this progress, the average length of life rose to 49.2 years in the period 1900-1902. The spectacular gains in longevity achieved since then have been reported in the STATISTICAL BULLETIN over a long series of years. It is sufficient here to note that in 1945 the average length of life in the United States was 65.8 years, having increased 16 years in less than five decades. This record is undoubtedly without parallel in the whole range of human existence, and may never again be equaled.

Yet, further progress is to be expected as present knowledge in medicine and sanitary science is more fully utilized and as new weapons to fight disease are developed. Our studies indicate that within the course of the next decade or two, it should be possible to extend the average length of life for the population of the United States to at least 70 years. What the ultimate possibilities are we can only conjecture. It may well be that medical science is now at the threshold of discoveries in the fields of cancer and of the degenerative diseases, which knowledge when crystallized and applied may add significantly to the biblical three score and ten.

NOTE—Among the recent references consulted in the preparation of this article are: J. Lawrence Angel, "The Length of Life in Ancient Greece," *Journal of Gerontology*, Vol. 2, page 18, January 1947: Josiah Cox Russell, "Late Mediaeval Population Patterns," *Speculum*, Vol. 20, page 157, April 1945.

Many Diseases Record New Low Death Rates

ALTHOUGH mortality conditions among Metropolitan Industrial policyholders in the third quarter of the current year were not quite as favorable as in the corresponding months of last year, the death rate for the first nine months as a whole is the lowest ever recorded for a January to September period. The death rate for this period, 7.3 per 1,000,* is about 2 percent below the figure for the corresponding months of last year, and is equal to the previous low for the comparable period of 1942, when the average age of the policyholders in the Industrial Department was somewhat less than it is at present. When allowance is made for the effect of the aging of the group on the death rate, the experience for 1947 is the best on record.

Policyholders at virtually every

*All death rates quoted in this article are exclusive of deaths from enemy action.

DEATH RATES PER 100,000 FROM ALL CAUSES, EXCLUDING WAR DEATHS (ENEMY ACTION). WHITE PERSONS, BY SEX AND AGE PERIODS. METROPOLITAN LIFE INSURANCE COMPANY, WEEKLY PREMIUM-PAYING INDUSTRIAL BUSINESS. FIRST NINE MONTHS OF 1947, 1946, AND 1945 COMPARED

AGE PERIOD YEARS	DEATH RATES PER 100,000						PERCENT CHANGE 1947 SINCE YEAR INDICATED			
	White Males			White Females			White Males		White Females	
	1947	1946	1945	1947	1946	1945	1946	1945	1946	1945
Ages 0 to 74	737.6	737.9	754.2	610.1	620.3	611.4	— *	— 2.2	— 1.6	— .2
Under 5	377.0	372.2	412.8	288.2	318.5	331.7	+ 1.3	— 8.7	— 9.5	—13.1
5 to 9	84.2	92.8	93.1	56.7	62.7	65.9	— 9.3	— 9.6	— 9.6	—14.0
10 to 14	71.1	76.8	78.4	42.0	47.5	51.1	— 7.4	— 9.3	—11.6	—17.8
15 to 19	128.0	152.0	177.4	67.9	69.5	67.6	—15.8	—27.8	— 2.3	+ .4
20 to 24	162.2	238.0	342.2	101.2	121.2	102.1	—31.8	—52.6	—16.5	— .9
25 to 34	197.0	233.5	301.3	146.0	165.2	170.7	—15.6	—34.6	—11.6	—14.5
35 to 44	475.2	522.1	553.0	292.0	305.5	305.2	— 9.0	—14.1	— 4.4	— 4.3
45 to 54	1,259.6	1,259.4	1,247.1	675.8	705.7	723.9	+ *	+ 1.0	— 4.2	— 6.6
55 to 64	2,700.2	2,654.5	2,692.8	1,525.7	1,575.9	1,598.6	+ 1.7	+ .3	— 3.2	— 4.6
65 to 74	5,475.1	5,506.8	5,695.1	3,916.1	4,104.5	4,116.9	— .6	— 3.9	— 4.6	— 4.9

*Less than 0.05 percent.

period of life shared in the improvement in mortality since last year. Among white females, decreases were recorded for the entire range of ages. White males registered reductions at all but two age ranges—the ages under 5, and 45 to 64 years; but even in these groups the increases were less than 2 percent. The largest declines among the male policyholders are observed at the military ages, and reflect very largely the sharp decreases in the accident toll among men who were released from military service. For comparison, the table above exhibits also the figures for 1945, in which year the death rate at some age periods was even more favorable than in 1946.

A number of diseases have registered declines in mortality so far this year, and most of them have established new low records. In the latter category are three of the four principal communicable diseases of childhood—measles, scarlet fever, and whooping cough. For diphtheria, the fourth of the group, the death rate of 0.6 per 100,000 has remained unchanged at last year's figure. The mortality from acute poliomyelitis has declined sharply, and although the rate is not at a minimum, it is only 0.4 per 100,000.

Far more important in terms of lives saved has been the decline in the mortality from pneumonia and influenza, as a group, to a new low. Despite the unfavorable experience in the spring, the death rate from the two diseases was 17 percent

below the corresponding rate last year, 28 percent below the average for the preceding five years, and 71 percent below the figure of only a decade ago. Apparently the day is not far distant when pneumonia and influenza, together, will be among the minor causes of death.

Especially noteworthy is the record for tuberculosis. Not only has the mortality from this disease set a new minimum, but the percent decline so far has been more than twice the average annual reduction in the past decade. The death rate among these insured is already below 35 per 100,000. Only 10 years ago the rate was about 50 per 100,000 and two decades ago almost 100 per 100,000.

Appendicitis is another disease which has dropped to a new low level in 1947. The sharp and uninterrupted decline in the mortality from this disease is to be credited very largely to the use of the sulfa drugs and of penicillin in the treatment of the complications which usually cause the death in fatal cases. The death rate for the first nine months of the year is 3.2 per 100,000, or less than one third that of 10 years ago.

The diseases incidental to childbearing record a rate approximately the same as that for last year, despite a marked rise in the birth rate. This clearly indicates that the decline in the hazards of pregnancy and childbearing, in evidence for some time, is still continuing.

The favorable trend of mortality from the infectious conditions contrasts somewhat with the experience for the diseases of middle and later life. Deaths from the cardiovascular-renal conditions, which now constitute approximately one half of all the deaths from disease in this insurance experience, show a slight increase as compared with last year. Cancer, which accounts for one sixth of the total, has reached a new high in mortality for this period of the year. These increases for cancer and for the degenerative diseases, however, in appreciable measure reflect changes in the age distribution of the insured population. Diabetes registered a slight drop in mortality from last year.

For the external causes of death the record has been generally satisfactory, suicides and accidents showing an improvement over 1946. For all forms of accidents combined, the decrease this year has brought the death rate to the all-time low of 45.5 per 100,000. This favorable experience is due, not only to the decline in deaths through the demobilization of men in military service, but also to reductions in home and in motor vehicle accidents. The mortality from home accidents is the lowest in our history. For motor vehicle fatalities the rate is the lowest for any peacetime year since 1922. Occupational accidents, however, show a somewhat higher death rate than in either 1945 or 1946, but the rate is still below the figure for the war years.

The decreased death toll from suicide for the nine-month period actually reflects the favorable expe-

rience for the first four months of the year; the rate in each of the past five months has been higher than that of a year ago. The homicide rate, although the same as in 1946, is higher than in any year since 1939.

Causes of Death Among American Physicians

IN a previous article* it was reported that the mortality of American physicians as a group is essentially the same as that for the white population in general. In the present report a comparison is made of the individual causes of death among the two groups. Inasmuch as 96 percent of the physicians are males, the comparison is restricted to that sex.

Although the leading causes of death among male physicians are not appreciably different from those among white men in the general population, the relative importance of the individual causes varies considerably for the two groups. The 20 leading causes of death among male physicians, shown in Table 1, cover more than nine tenths of the total deaths. First on the list, by a wide margin, are the diseases of the heart and coronary arteries, which account for 40.7 percent of the total number. Next in rank are intracranial lesions of vascular origin, chiefly cerebral hemorrhage, which account for 10.8 percent of the total. These are followed in turn by cancer, with almost 10 percent of the deaths among physicians, nephritis with 6 percent, and pneumonia and influenza with 5½ percent. The five leading causes alone account for almost three quarters of the deaths from all causes combined.

Compared with white men in the general population, male physicians have much lower death rates from most infectious diseases, from the conditions amenable to surgery, and from accidents. The death rate from tuberculosis among male physicians is less than half that of white males of the same ages in the general population; for syphilis, the ratio is only one third. The more favorable mortality among physicians from these two conditions reflects largely the better situation in the social-economic class to which they belong and also a favorable self-selection on the part of those who undertake the medical profession. In addition, where physicians are exposed to infections, they have the advantages of better knowledge of how to protect themselves and of how to control any infections that they may have acquired. The death rate from cancer among male physicians is four fifths of that for white males of the same ages; in the case of appendicitis, hernia and intestinal obstruction, the ratio is three quarters. The death rate from automobile accidents among male

*"Longevity of American Physicians," STATISTICAL BULLETIN, August 1947, page 1. Both the current article and the one just quoted are based upon the paper, "Longevity and Mortality of American Physicians, 1938–1942," by Louis I. Dublin and Mortimer Spiegelman, *Journal of the American Medical Association*, Vol. 134, page 1211, August 9, 1947.

physicians is about nine tenths that for white males generally; for all other types of accidents, the ratio is only three fifths.

These advantages are offset, however, by a relatively high mortality from the cardiovascular conditions, as may be clearly seen in Table 2. The death rate from cerebral hemorrhage among male physicians is

TABLE 1—RANK OF THE LEADING CAUSES OF DEATH AMONG MALE PHYSICIANS AT AGES 25 AND OVER; UNITED STATES, 1938–1942

RANK	CAUSE OF DEATH	DEATHS		DEATH RATE PER 100,000	RANK	CAUSE OF DEATH	DEATHS		DEATH RATE PER 100,000
		Number	Percent				Number	Percent	
	All causes of death	17,165	100.0	2,052.6	12	Diseases of the prostate	132	.8	15.8
1	Diseases of the heart and coronary arteries	6,994	40.7	836.3	13	Pulmonary embolism and congestion	115	.7	13.8
2	Intracranial lesions of vascular origin	1,863	10.8	222.8	14	Ulcer of the stomach or duodenum	107	.6	12.8
3	Cancer	1,659	9.7	198.4	15	Biliary calculi and other diseases of the gall bladder	102	.6	12.2
4	Nephritis	1,016	5.9	121.5	16	Hernia and intestinal obstruction	101	.6	12.1
5	Pneumonia and influenza	941	5.5	112.5	17	Leukemia and aleukemias	95	.6	11.4
6	Accidents	793	4.6	94.8	18	Appendicitis	86	.5	10.3
7	Arteriosclerosis	419	2.4	50.1	19	Syphilis	76	.4	9.1
8	Diabetes mellitus	372	2.2	44.5	20	Tumors, non-malignant and unspecified	69	.4	8.3
9	Suicide	326	1.9	39.0					
10	Tuberculosis	267	1.6	31.9					
11	Cirrhosis of the liver	216	1.3	25.8					

TABLE 2—ANNUAL DEATH RATES FROM THE PRINCIPAL CAUSES FOR MALE PHYSICIANS COMPARED WITH WHITE MALES IN THE GENERAL POPULATION*
AGES 25 AND OVER; UNITED STATES, 1938–1942

CAUSE OF DEATH	DEATH RATES PER 100,000		RATIO OF DEATH RATES: PHYSICIANS TO WHITE MALES	CAUSE OF DEATH	DEATH RATES PER 100,000		RATIO OF DEATH RATES: PHYSICIANS TO WHITE MALES
	Male Physicians	U. S. White Males			Male Physicians	U. S. White Males	
All causes of death	2,052.6	2,022.1	1.02	Automobile accidents	44.2	49.5	.89
Leukemia and aleukemias	11.4	6.5	1.75	Cancer	198.4	244.5	.81
Biliary calculi and other diseases of the gall bladder	12.2	8.4	1.45	Appendicitis	10.3	13.4	.77
Intracranial lesions of vascular origin	222.8	185.9	1.20	Hernia and intestinal obstruction	12.1	16.1	.75
Diseases of the heart and coronary arteries†	845.3	713.7	1.18	Nephritis†	119.3	162.9	.73
Arteriosclerosis	50.1	43.2	1.16	Ulcer of the stomach or duodenum	12.8	20.8	.62
Cirrhosis of the liver	25.8	23.3	1.11	Accidents, other than automobile	50.6	84.0	.60
Pneumonia and influenza	112.5	103.0	1.09	Diseases of the prostate	15.8	29.1	.54
Diabetes mellitus	44.5	41.2	1.08	Tuberculosis	31.9	70.4	.45
Suicide	39.0	37.6	1.04	Syphilis	9.1	26.5	.34

*The general population death rates have been adjusted on the basis of the age distribution of male physicians in 1940.

†The death rates relate to the period 1939–1942. Because of changes in the classification procedure (International List of Causes of Death) introduced in 1939, data for the general population for this cause are not comparable with earlier years.

120 percent of that among white males of the same ages; for arteriosclerosis the ratio is 116 percent, for the diseases of the heart and coronary arteries 118 percent. If the recorded death rates from diseases of the coronary arteries are considered alone, the ratio of mortality of physicians to that of white males reaches the high figure of 181 percent. Part of this excess may simply reflect that with the special opportunities for expert diagnosis usually available to physicians, the disease is discovered and recorded more frequently among them. Much of the excess mortality, however, is real and appears to result from the special activities and the strains imposed upon the medical profession.

The mortality from leukemia among male physicians is 1¾ times that of white males generally, a higher ratio than for any other cause of death. Although better diagnosis may account for some of this excess, opinion has been expressed recently that, in some cases, physicians may have acquired the disease as a result of their exposure to X-rays.

There is room for much intensive study to determine the underlying factors in those conditions for which physicians experience a higher mortality than the general population. Such investigation would incidentally throw valuable light on a number of current medical problems.

Dangers in Outdoor Sports

OUTDOOR sports are extremely popular among American men, both young and old. These forms of recreation, beyond question, return large dividends in improved health. Too frequently, however, the hazards associated with sports are forgotten or disregarded by those bent on pleasure, with serious and even fatal results.

Precise information is lacking, but it is estimated that about 3,000 boys and men, ages 15 years and older, are accidentally killed each year in the United States while engaged in one or another outdoor sport. Many times this number sustain nonfatal injuries of varying degrees of severity. The data presented in this study are based, for the most part, upon an analysis of the death claim records of Metropolitan Industrial policyholders who died from accidents in outdoor sports in 1946; some use has been made also of data for the general population available from other sources.

Most of the fatalities from outdoor sports among these policyholders, about 70 percent of the total, were accounted for by three sports—hunting, fishing, and swimming. Hunting alone was responsible for a little more than 10 percent of all deaths from outdoor sports. As one would expect, a very considerable proportion of deaths in hunting accidents, about three fourths, were due to wounds inflicted by the discharge of firearms either by the injured person or by another. It is apparent from the details regarding

the accidents given on the death claim records, that many of the men who go hunting know little or care little about the proper handling of a gun. Nor are firearms the only hazard associated with hunting. For example, last year five hunters in this insurance experience drowned when their small boats capsized or when they fell from them. One hunter who became separated from his companions in the woods was found frozen to death several days later. Another hunter died when he fell from the tree he had climbed in an attempt to capture a small animal.

Fishing took more than twice as many lives among men as did hunting. This does not necessarily mean that fishing is more hazardous than hunting. Actually, the relative danger in various sports cannot be measured, since there is no accurate information regarding the number of men who take part in them. Of the fatalities attributed to fishing accidents, almost two thirds were the result of drownings involving mishaps in small boats. Most of the others who lost their lives in this sport were drowned when in an unguarded moment they fell into the water while fishing from either a bank or a pier. A few men perished when they were caught in a swift current of the waters in which they were fishing.

The need to know more about handling small boats and acting safely while in them is not limited to fishermen and hunters. Twenty-six of the deaths in this insurance experience—practically the same number as the total for hunting accidents—were among persons who were drowned in mishaps while merely rowing, canoeing, or cruising about in small boats for pleasure.

Swimming and bathing, of all sports, claimed the largest number of lives, accounting in this insurance experience for more than one third of all lives lost in such pursuits. Nearly one half the deaths resulting from this pastime occurred among young men 15 to 19 years of age. The relatively heavy death toll from swimming each year reflects in large part the popularity of the sport in our country. It also points to the fact that very large numbers of men who go into the water either to swim or to bathe are poor swimmers or nonswimmers. While they contribute heavily to the loss of life, the toll each year is augmented by many drownings among good swimmers who attempt feats beyond their strength. In addition to those drowned, a considerable number of swimmers die annually as a result of skull fractures, broken necks, or other injuries they receive in diving accidents.

Among the other popular sports represented in the death toll among the insured men in 1946 were bicycling, baseball, football, boxing, target shooting, horseback riding, auto racing, and sledding. Bicycling accounted for about 5 percent of the total deaths in outdoor sports.

It is not expected, nor is it desirable that because of the hazards involved, men forego the pleasure and

relaxation that outdoor sports afford. But every effort should be made to acquaint sportsmen with the chief dangers they may encounter and with the best methods to guard against or overcome them.

Pneumonia Rapidly Becoming a Minor Cause of Death

As noted elsewhere in this issue, the mortality from pneumonia and influenza continues to decline rapidly and the prospects are that the two diseases, together, will be little more than a minor cause of death in the near future.

The gains against pneumonia and influenza in recent years have been truly remarkable. It is very likely that for the year 1947 the death rate from these two diseases will be about 25 per 100,000 among Metropolitan Industrial policyholders, all ages combined. Pneumonia and influenza as a group now rank eighth as a cause of death in this insurance experience, and account for less than 4 percent of the total mortality. Only 10 years earlier, prior to the extensive use of serums and chemotherapy, these diseases were outranked only by heart disease and cancer, and were responsible for 10 percent of the deaths from all causes combined. Had the trend for the years prior to 1937 continued to date, the current mortality rate would have been in the neighborhood of 60 per 100,000, or more than twice the rate that now prevails among these insured.

Every group among these insured, irrespective of age or sex, has benefited greatly from the marked improvement in mortality. In the past decade, declines of more than 70 percent have been recorded at most age periods among both white males and white females; at ages 25 to 34 the reduction in each sex has been as much as 80 percent. At no age period up to 75 years was the decrease less than 56 percent between 1935-1936 and 1945-1946.

Although spectacular gains have been made and much more progress may be expected, the pneumonia problem is as yet not solved. The toll taken year after year in the past was so high, that even after the remarkable success of recent years, pneumonia and influenza still account for a large number of deaths. It must also be remembered that only certain types of pneumonia respond to treatment by the sulfa drugs and penicillin; the virus pneumonias, for instance, are not amenable to chemotherapy. Altogether, there is much to be done in this already well-developed field, particularly in perfecting active immunization and in widening its use.

Comparative Data on the Causes of Death Among Industrial Policyholders

The following table shows the mortality among Industrial policyholders for September 1947 and September 1946, together with the death rates for the first nine months of 1947, 1946, and 1945.

DEATH RATES* PER 100,000 POLICYHOLDERS FROM SELECTED CAUSES
WEEKLY PREMIUM-PAYING INDUSTRIAL BUSINESS
METROPOLITAN LIFE INSURANCE COMPANY

CAUSE OF DEATH	ANNUAL RATE PER 100,000 POLICYHOLDERS*				
	September 1947	September 1946	Year to Date: End of September		
			1947	1946	1945
ALL CAUSES—TOTAL	678.2	649.0	735.3	764.7	853.1
—Excluding war deaths	*677.9*	*645.9*	*734.6*	*748.7*	*745.8*
Typhoid fever	0.2	0.2	0.2	0.2	0.3
Measles	.2	.1	.2	.8	.2
Scarlet fever	—	.1	‡	.1	.3
Whooping cough	.4	.7	.5	.6	.8
Diphtheria	.5	.8	.6	.6	.8
Influenza	.8	.5	3.1	5.2	3.3
Pneumonia (all forms)	15.4	15.7	23.7	27.2	27.9
Tuberculosis (all forms)	30.9	30.0	34.9	37.9	37.9
Tuberculosis of respiratory system	28.3	27.2	31.7	34.3	34.3
Syphilis	7.0	6.3	8.0	8.2	8.6
Acute poliomyelitis	1.2	4.3	.4	1.1	.7
Cancer (all forms)	118.0	110.2	119.6	115.1	112.3
Diabetes mellitus	26.0	21.2	26.7	27.0	25.3
Cerebral hemorrhage	59.4	54.5	68.4	67.8	67.1
Diseases of the coronary arteries and angina pectoris	70.8	62.0	78.4	71.4	67.0
Other chronic heart diseases†	141.3	133.4	162.5	164.8	159.1
Diarrhea and enteritis	2.8	2.0	3.0	2.5	3.5
Appendicitis	4.2	3.1	3.2	3.5	5.1
Chronic nephritis	33.7	33.5	41.2	43.1	44.7
Puerperal state—total	3.4	4.1	3.3	3.2	3.5
Suicides	8.1	7.4	7.3	7.5	6.3
Homicides	4.1	3.9	4.0	4.0	3.1
Accidents—total	53.5	45.8	45.5	49.4	55.8
Home accidents	6.2	7.6	9.8	10.8	10.1
Occupational accidents	5.2	3.9	5.3	4.8	5.2
Motor vehicle accidents	17.8	14.5	15.3	15.8	13.5
War deaths (enemy action)	.3	3.1	.7	16.0	107.3
All other causes of death	96.3	106.3	99.9	107.5	112.3

*The rates for 1947 are subject to slight correction, since they are based on provisional estimates of lives exposed to risk.
†International List (1940) titles 92, 93 (c), (d), (e), and 95. ‡Less than 0.05 per 100,000.

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MORTALITY FROM ALL CAUSES

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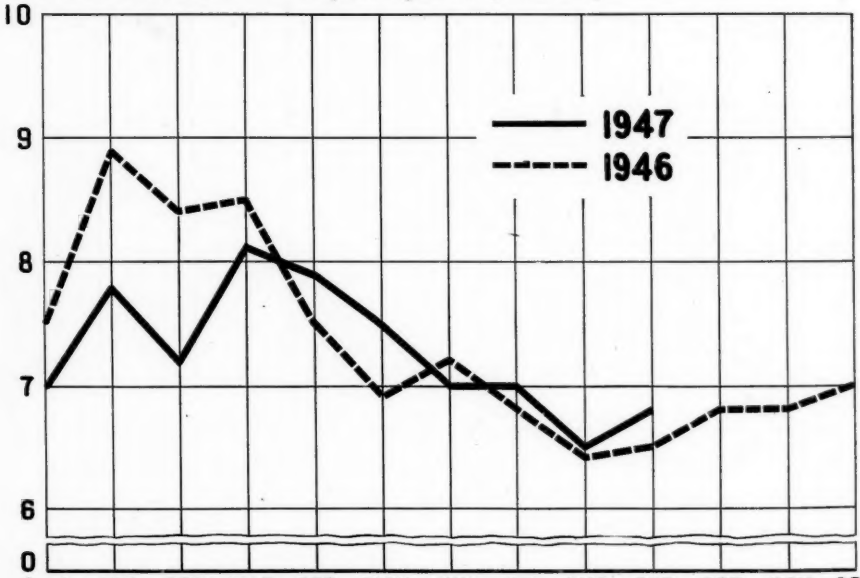
DEATH RATES PER 1,000 ANNUAL BASIS (*1947 figures are provisional*)



(DEC)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1946	8.9	8.4	8.5	7.5	6.9	7.2	6.8	6.4	6.5	6.8	6.8	7.0
1947	7.8	7.2	8.1	7.9	7.5	7.0	7.0	6.5	6.8			

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